

PATENT
Serial No. 10/511,812
Amendment in Reply to Office Action of September 26, 2006

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A device for recording data on a recording medium which can be written by a recording head unit which produces a recording energy beam, the device comprising:

a control assembly for controlling intensity of the recording beam,

a set of measures for supplying control data to said control assembly comprising a measuring circuit for measuring quality of recorded signals,

a database relating to the recording medium for supplying previous data to said control assembly,

wherein the set of measures comprises a temperature measuring circuit configured to adjust said intensity based on temperature, and a jitter measuring circuit configured to measure jitter points

PATENT

Serial No. 10/511,812

Amendment in Reply to Office Action of September 26, 2006

associated with different power levels provided to a source of the recording beam, an optimal power level provided to the source being associated with one of the jitter points having a lowest error.

2. (Previously Presented) The device as claimed in claim 1, wherein at least one of the measuring circuits determines parameters through measurements from real-time recording conditions.

Claim 3 (Canceled)

4. (Previously Presented) The device as claimed in claim 1, wherein the temperature measuring circuit operates in real time during recording.

5. (Previously Presented) The device as claimed in claim 1, wherein the temperature measuring circuit includes a circuit for measuring threshold current needed by a semiconductor laser to provide said recording energy beam.

PATENT

Serial No. 10/511,812

Amendment in Reply to Office Action of September 26, 2006

6. (Previously Presented) The device as claimed in claim 1, wherein at least one of the parameters supplied to the control assembly is related to a scanning velocity at which recording take place.

7. (Previously Presented) The device as claimed in claim 1, wherein at least one of the measuring circuits is a tilt measuring circuit that operates in real time during recording.

8. (Previously Presented) The device as claimed in claim 1, wherein at least part of the database is contained at a location of said medium.

9. (Previously Presented) The device as claimed in claim 1, wherein at least part of the database is contained in a memory.

10. (Previously Presented) The device as claimed in claim 1, wherein the recording medium is in the form of an optical disc.

11. (Previously Presented) A recording method comprising the

PATENT

Serial No. 10/511,812

Amendment in Reply to Office Action of September 26, 2006

acts of:

inserting a medium to be recorded into a recording device,
identifying the medium,
rejecting the medium if it is unsuitable for recording,
recording test data on the medium,
reading the test data,
determining recording power based on signal levels from
reading the test data,
entering a first correction of said recording power as a
function of jitter data associated with different power levels
provided to a source of a recording beam, an optimal power level of
the recording power being associated with one of the jitter data
having a lowest error, and
entering a second correction as a function of temperature and
scanning speed of the medium.

12. (Previously Presented) The method as claimed in claim 11,
wherein the entering the second correction act is carried out in
real time during the recording of data.

PATENT

Serial No. 10/511,812

Amendment in Reply to Office Action of September 26, 2006

13. (Previously Presented) A recording medium obtained by the implementation of the method as claimed in claim 11.

14. (Previously Presented) The recording medium as claimed in claim 13, wherein the recording medium is an optical disc.

Claim 15-19 (Canceled)

20. (Previously Presented) The device of claim 1, wherein the error includes a phase error occurring while synchronizing data with a clock reference frequency.

21. (Previously Presented) The device of claim 1, wherein the power levels are consecutively increasing or decreasing.

22. (Previously Presented) The device of claim 1, wherein the power levels are separated by unequal steps.

23. (Previously Presented) The device of claim 1, wherein a first straight line is drawn through a first set of the jitter

PATENT

Serial No. 10/511,812

Amendment in Reply to Office Action of September 26, 2006

points and a second straight line is drawn through a second set of the jitter points, an intersection of the first straight line with the second straight line being associated with the optimal power level.

24. (Previously Presented) The device of claim 23, wherein the optimal power level is determined by interpolation of two of the different power levels associated with two of the jitter points nearest to the intersection.

25. (Previously Presented) A device for recording data on a medium comprising:

a source configured to provide a beam for the recording of the data on the medium;

a control assembly configured to control intensity of the beam;

a jitter measuring circuit configured to measure jitter points associated with different power levels provided to the source, an optimal power level being associated with one of the jitter points having a lowest error.

PATENT

Serial No. 10/511,812

Amendment in Reply to Office Action of September 26, 2006

26. (Previously Presented) The device of claim 25, wherein the error includes a phase error occurring while synchronizing data with a clock reference frequency, and the power levels are consecutively increasing or decreasing by unequal steps.

27. (New) The device of claim 1, wherein the jitter points are measured while taking into account phase errors that occur while synchronizing regenerated binary data with a regenerated clock frequency used as reference.